

**IN THE U.S. PATENT AND TRADEMARK OFFICE**  
**BOARD OF PATENT APPEALS AND INTERFERENCES**

<b>Application No.:</b> 10/517,957	<b>Confirmation No.</b> 3769
<b>Application of:</b> Hughes, et al.	<b>Group Art Unit:</b> 1612
<b>Filing Date:</b> August 11, 2005	<b>Examiner:</b> Sznaidman, Marcos L.
<b>Title:</b> Spiroindolinepiperidine Derivatives	<b>Docket No.</b> 50698 <b>Customer No.</b> 86344

**APPEAL BRIEF**

**VIA EFS**

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

This Appeal Brief is being submitted pursuant to 37 C.F.R. § 41.37 in reference to the Notice of Appeal previously filed in the above-referenced Patent Application on July 9, 2009.

## **1. REAL PARTY IN INTEREST**

The Real Parties in Interest in the present Application are:

(1) Syngenta Limited, the co-assignee of the present Application by assignment from certain named inventors, which assignment was recorded on April 15, 2009 at Reel/Frame No. 022547/0051; and

(2) Syngenta Participations AG the co-assignee of the present Application by assignment from certain named inventors, which assignment was recorded on April 15, 2009 at Reel/Frame No. 022546/0963.

## **2. STATEMENT OF RELATED CASES**

There are no other appeals or interferences known to Appellants, or Appellants' legal representatives, that will directly affect, will be affected by, or which have a bearing on the Board's decision in the pending appeal in this Application.

## **3. STATUS OF THE CLAIMS**

Claims 1 – 14 are pending in the application. Claims 1 – 7 and 9 stand withdrawn from consideration. Claims 8 and 10 – 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB1603030 (Hoechst) in view of US 3,959,475 to Bauer et. al. (Bauer). A copy of the claims on appeal in this Application (i.e., Claims 1-14) is set forth in the attached Claims Appendix.

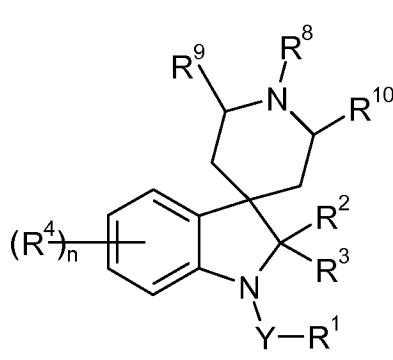
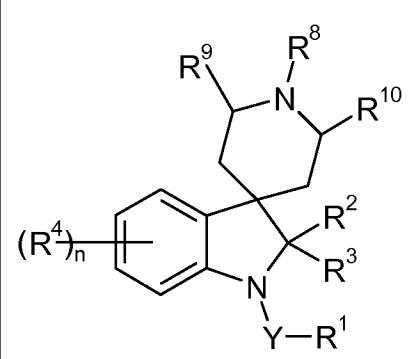
#### 4. STATUS OF AMENDMENTS

No claims were amended filed subsequent to the Final Office Action closing prosecution.

On July 9, 2009, Appellants filed a Notice of Appeal responsive to the Final Office Action mailed April 9, 2009. Appellants also filed a Reply under 37 CFR 1.116 reiterating Appellants' position with respect to the rejections set forth in the Final Office Action mailed April 9, 2009.

#### 5. SUMMARY OF THE CLAIMED SUBJECT MATTER

In accordance with 37 C.F.R. § 14.37, a concise explanation of the subject matter defined in the sole independent claim (Claim 8) involved in the present Appeal is set forth below in tabular format. References to pages and lines of the Specification are designated by: "page \_\_\_, lines \_\_\_."

Claim As Written	Explanation
<p>8. A compound of formula IK</p>  <p>wherein Y is a single bond, C=O or S(O)<sub>q</sub>, C<sub>1-6</sub>alkyl, C<sub>2-6</sub> alkenyl, carbonyl(C<sub>1-6</sub>)alkyl,</p>	<p>Independent claim 8 recites compounds of the general formula:</p>  <p>with R<sup>1</sup> to R<sup>10</sup>, n and Y being defined as set forth on at least page 1, line 15</p>

<p> C<sub>2-6</sub> alkynylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub>  alkoxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub>  alkenyloxy carbonyl(C<sub>1-6</sub>)-alkyl, C<sub>3-6</sub>  alkynyloxy carbonyl(C<sub>1-6</sub>)alkyl,  aryloxy carbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub>  alkylthio(C<sub>1-6</sub>)-alkyl, C<sub>1-6</sub>  alkylsulfinyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub>  alkylsulfonyl(C<sub>1-6</sub>)alkyl,  aminocarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub>  alkylaminocarbonyl(C<sub>1-6</sub>)alkyl, di(C<sub>1-6</sub>)  alkylaminocarbonyl(C<sub>1-6</sub>)alkyl,  phenyl(C<sub>1-4</sub>)alkyl (wherein the phenyl  group is optionally substituted by  halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub>  haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy), heteroaryl(C<sub>1-4</sub>)alkyl  (wherein the heteroaryl group may be  substituted by halogen, nitro, cyano, C<sub>1-6</sub>  alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy), heterocyclyl(C<sub>1-4</sub>)alkyl  (wherein the heterocyclyl group may be  substituted by halogen, cyano, C<sub>1-6</sub>  alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy), phenyl (optionally  substituted by halogen, nitro, cyano, C<sub>1-6</sub>  alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy), heteroaryl (optionally  substituted by halogen, nitro, cyano, C<sub>1-6</sub>  alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy), C<sub>1-6</sub> alkoxy, C<sub>1-6</sub>  haloalkoxy, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub>  haloalkenyl, C<sub>2-6</sub> cyanoalkenyl, C<sub>2-6</sub>  alkynyl, C<sub>3-7</sub> cycloalkyl, formyl,  heterocyclyl (optionally substituted by  halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub>  haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>  haloalkoxy) or C<sub>1-6</sub> alkylthio; R<sup>2</sup> and R<sup>3</sup>  are independently hydrogen or C<sub>1-4</sub>  alkyl; each R<sup>4</sup> is independently halogen,  cyano, C<sub>1-10</sub> alkyl optionally substituted </p>	<p> through page 3, line 2 of the  specification as filed. The compounds  are useful in agriculture as insecticides,  acaricides, molluscicides and/or  nematicides as set forth on page 1, lines  12-15 of the specification as filed. </p>
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<p>by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy), C<sub>2-6</sub> alkenyl optionally substituted by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy) or C<sub>2-6</sub> alkynyl optionally substituted by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy); n is 0, 1, 2, 3 or 4; R<sup>8</sup> is -C(R<sup>51</sup>)(R<sup>52</sup>)-[CR<sup>53</sup>=CR<sup>54</sup>]<sub>z</sub>-R<sup>55</sup> where z is 1 or 2, preferably 1, R<sup>51</sup> and R<sup>52</sup> are each independently H, halo or C<sub>1-2</sub> alkyl, R<sup>53</sup> and R<sup>54</sup> are each independently H, halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> haloalkyl and R<sup>55</sup> is phenyl substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy; R<sup>9</sup> and R<sup>10</sup> are both hydrogen; and salts or N-oxides thereof provided that R<sup>8</sup> is not methyl and YR<sup>1</sup> is not SO<sub>2</sub>CH<sub>3</sub>, methyl, ethyl, phenyl or fluoro-substituted phenyl.</p>	
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## 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Presently, Claims 1-14 are pending in the Application. Claims 8 and 10 – 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB1603030 (Hoechst) in view of US 3,959,475 to Bauer et. al. (Bauer).

## 7. ARGUMENT

**A. The rejection of 8 and 10 – 14 under 35 U.S.C. 103(a) as being unpatentable over Hoechst (GB1603030) in view of US 3,959,475 to Bauer et. al. (Bauer) should be overturned because the Examiner has failed to establish a *prima facie* case of obviousness.**

Claims 8 and 10 – 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB1603030 (Hoechst) in view of US 3,959,475 to Bauer et. al. (Bauer). The Examiner contends that both Hoechst and Bauer disclose compounds having similar utility and structure as the instantly claimed compounds (See Advisory Action dated July 21, 2009, page 2). The Examiner cites In re Wilder for the proposition that: “When chemical compounds have “very close” structural similarities and similar utilities, without more a *prima facie* case may be made...” (See final Office Action dated April 9, 2009, page 8) Thus, the Examiner contends that it would have been obvious to the skilled in the art to combine the teachings of Hoechst and Bauer to arrive at the instantly claimed compounds with the motivation of making a better molecule with tranquilizing properties (See Advisory Action dated July 21, 2009, page 2).

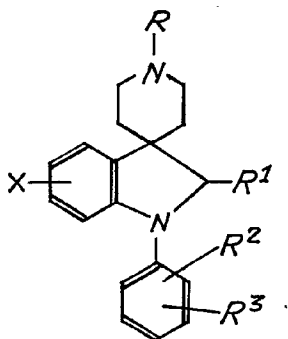
According to the USPTO Manual of Patent Examination Procedure (“MPEP”) section 2144.09:

*A prima facie* case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. An obviousness rejection based on similarity in chemical structure and function entails the motivation of one

skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties. [emphasis added]

Therefore, in order to make a case of prima facie obviousness, two factors need to be established: i) close structural similarity; and ii) similar utility. A similar utility is manifestly not present when comparing the present invention with the disclosure of Hoechst because the utility of the presently claimed compounds is the **killing** of agriculturally harmful insects, molluscs, acarids and nematodes, while the utility disclosed in Hoechst one of pharmaceuticals for **tranquilizing** mammals.

Specifically, Hoechst discloses compounds of formula (II)



wherein R, R<sup>1</sup>-R<sup>3</sup> and X are variously defined, which are useful as tranquilizers due to their ability to depress the central nervous system of mammals (page 7, lines 4 to 5). Accordingly, the utility of the compounds disclosed in Hoechst is **completely different** from the instant utility. A tranquilizer affecting the central

nervous system of mammals cannot be equated with an insecticide, acaricide, molluscicide or nematocide.

Further, Appellants respectfully submit that one of ordinary skill would never contemplate or consider a publication relating to tranquilizers when attempting to develop an agricultural insecticide. There simply is no teaching or suggestion in Hoechst that the compounds disclosed therein could be used as insecticides, acaricides, molluscicides and/or nematocides. There is no teaching or suggestion that the compounds can be used in agriculture. In fact, there is no suggestion that the compounds have any utility other than as pharmaceutical tranquilizers. Thus, no *prima facie* case has been made over Hoechst for at least this reason.

Bauer fails to remedy the deficiencies of Hoechst. The Examiner argues that Bauer teaches compounds having the same/similar utility to the compounds of the present invention. Appellants respectfully disagree. Bauer does not disclose agrochemical usage of the instantly claimed compounds, much less teach or suggest the use of the instantly claimed compounds as insecticides. In fact, Bauer discloses that the compounds described therein are useful as antidepressants, tranquilizers and analgesic agents in mammals (see column 5, lines 27 – 32; lines 64 – 66; and column 6, lines 21 – 26 and 43 – 45). Thus, the utility of Bauer is the



same or similar to the utility in Hoescht and therefore Bauer cannot remedy the deficiencies of Hoescht.

Further, the compounds disclosed in Bauer are structurally very different from those of the instantly claimed compounds. Specific differences include:

i) Ring heteroatom: Bauer requires oxygen while the instantly claimed compounds include nitrogen, which is very different in terms of valency and basicity;

ii) Ring heteroatom position: the position of the heteroatom in the fused ring system differ greatly (see the 2- position of Bauer versus the heteroatom in the 1- position of the instantly claimed compounds);

iii) Heteroatom substitution: the compounds of Bauer are unsubstituted on the ring heteroatom, whereas a variety of substituents are tolerated on the ring heteroatom of the compounds of the instantly claimed compounds.

One of ordinary skill would have to make numerous changes to the compounds of Bauer in order to arrive at the instantly claimed compounds. The person of ordinary skill would be aware that making any one change to the structure as noted above would likely result in a loss of activity. The person of ordinary skill would simply not be able to predict that the compounds of the present invention would be active because they differ in a number of important respects from those of Bauer.

Moreover, the person of ordinary skill would never realistically combine the disclosure of Hoechst with that of Bauer in order to prepare insecticidal compounds. The disclosures of these documents relate to totally different technologies. The relevant person of ordinary skill in the art would be a chemist working in the field agrochemical research. He would have no reason to suppose that the compounds of Hoechst would have any insecticidally useful properties. In fact, the person of ordinary skill, contemplating the teaching of Hoechst, would be taught away from the compounds of the present invention. The fact that the compounds of Hoechst are disclosed as psychoactive in mammals would motivate the skilled person to avoid such structures as potential insecticides.

Lastly, even if one were to combine Bauer and Hoescht despite lacking any motivation to do so, one would not arrive at the present invention. The structural differences are neither disclosed nor suggested. The cited references fail to support the recitations of the present invention.

In summary, the Examiner has not met the burden of proving a case of prima facie obviousness, because:

- i) The compounds of Hoechst have a completely different utility from those of the present invention;

- ii) The compounds of Bauer have a completely different utility from those of the present invention and are structurally very remote from those of the present invention;
- iii) The skilled person would never contemplate combining the teaching of Bauer with that of Hoechst in order to arrive at the inventive compounds and even if they were to combine, the skilled person would not achieve the present invention; and
- iv) The disclosure of Hoechst actually teaches away from the use of spiroindoline-3,4-piperidines as insecticides.

Thus, a *prima facie* case of obviousness has not been established because the Examiner has failed to properly consider the factual differences between the claimed invention and the prior art. Accordingly, Appellants request that the rejection of Claims 8 and 10-14 under 35 U.S.C. § 103(a) be withdrawn.

## **8. CLAIMS APPENDIX**

A Claims Appendix detailing the claims involved in the present Appeal is attached hereto, beginning at page 13.

## **9. EVIDENCE APPENDIX**

An Evidence Appendix is attached at page 24, but since no additional evidence has been entered or relied upon in this Appeal, the Evidence Appendix contains no information.

## **10. RELATED PROCEEDINGS APPENDIX**

Since there are no related appeals, interferences, or other proceedings, no decisions have been rendered and/or included in the Related Proceedings Appendix attached hereto at page 25.

## **11. CONCLUSION**

The Examiner fails to establish a prima facie case of obviousness due to a failure to properly establish the necessary factual underpinnings required by the examination guidelines. Appellants respectfully request withdrawal of the rejections under 35 U.S.C. 103(a). Accordingly, claims 8, 10-14 are believed to be allowable and such action is requested.

Respectfully submitted,

Date: September 8, 2009

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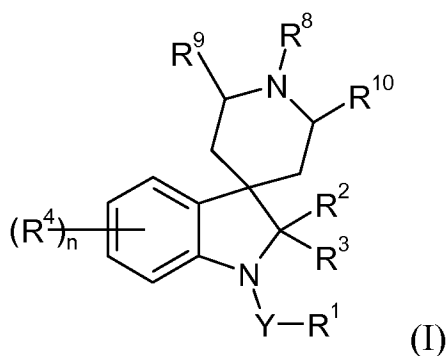
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## CLAIMS APPENDIX

### Claims Involved in the Appeal:

In the Claims:

1. (Withdrawn) A method of combating and controlling insects, acarines, nematodes or molluscs which comprises applying to a pest, to a locus of a pest, or to a plant susceptible to attack by a pest an insecticidally, acaricidally, nematocidally or molluscicidally effective amount of a compound of formula (I):



wherein Y is a single bond, C=O, C=S or S(O)<sub>q</sub> where q is 0, 1 or 2; R<sup>1</sup> is hydrogen, optionally substituted alkyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, aminocarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted dialkylaminocarbonyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted heterocycloxy, cyano, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, formyl, optionally substituted heterocyclyl, optionally substituted alkylthio, NO or NR<sup>13</sup>R<sup>14</sup> where R<sup>13</sup> and R<sup>14</sup> are independently hydrogen, COR<sup>40</sup>,

optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl or  $R^{13}$  and  $R^{14}$  together with the N atom to which they are attached form a group  $-N=C(R^{41})-NR^{42}R^{43}$ ;  $R^2$  and  $R^3$  are independently hydrogen, halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted aryl or  $C(O)NR^{15}R^{16}$  where  $R^{15}$  and  $R^{16}$  are independently hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocyclyl, or  $R^2$  and  $R^3$  together are  $=O$ , or  $R^2$  and  $R^3$  together with the atoms to which they are attached form a 4, 5, 6, or 7 membered carbocyclic or heterocyclic ring; each  $R^4$  is independently halogen, nitro, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted  $C_{2-6}$  alkynyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted dialkylaminocarbonyl, optionally substituted  $C_{3-7}$  cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio or  $R^{19}R^{20}N$  where  $R^{19}$  and  $R^{20}$  are, independently, hydrogen,  $C_{1-8}$  alkyl,  $C_{3-7}$  cycloalkyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkynyl,  $C_{3-7}$  cycloalkyl( $C_{1-4}$ )alkyl,  $C_{2-6}$  haloalkyl,  $C_{1-6}$  alkoxy( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkoxycarbonyl or  $R^{19}$  and  $R^{20}$  together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two  $C_{1-6}$  alkyl groups, or 2 adjacent groups  $R^4$  together with the carbon atoms to which they are attached form a 4, 5, 6, or 7 membered carbocyclic or heterocyclic ring which may be optionally substituted by halogen; n is 0, 1, 2, 3 or 4;  $R^8$  is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted alkoxy,

optionally substituted aryloxy, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl or optionally substituted alkenylcarbonyl; R<sup>9</sup> and R<sup>10</sup> are independently hydrogen, halogen, optionally substituted alkyl, optionally substituted aryl or R<sup>9</sup> and R<sup>10</sup> together form a group -CH<sub>2</sub>-, -CH=CH- or -CH<sub>2</sub>CH<sub>2</sub>-; R<sup>40</sup> is H, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted aryl, optionally substituted aryloxy optionally substituted heteroaryl, optionally substituted heteroaryloxy or NR<sup>44</sup>R<sup>45</sup>; R<sup>41</sup>, R<sup>42</sup> and R<sup>43</sup> are each independently H or lower alkyl; R<sup>44</sup> and R<sup>45</sup> are independently optionally substituted alkyl, optionally substituted aryl or optionally substituted heteroaryl or salts or N-oxides thereof.

2. (Withdrawn) A method according to claim 1 wherein Y is a bond or is C=O.

3. (Withdrawn) A method according to claim 1 wherein R<sup>1</sup> is hydrogen, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> cyanoalkyl, C<sub>1-6</sub> haloalkyl, C<sub>3-7</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, heteroaryl(C<sub>1-6</sub>)alkyl (wherein the heteroaryl group may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the heteroaryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), aryl(C<sub>1-6</sub>)alkyl (wherein the aryl group may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the aryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), C<sub>1-6</sub> alkylcarbonylamino(C<sub>1-6</sub>)alkyl, aryl (which may be optionally

substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the aryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), heteroaryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the heteroaryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, phenoxy (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryloxy (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocycloxy (optionally substituted by halo, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), cyano, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>3-6</sub> cycloalkyl, C<sub>5-7</sub> cycloalkenyl, heterocyclyl (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> haloalkylthio or NR<sup>13</sup>R<sup>14</sup> where R<sup>13</sup> and R<sup>14</sup> are independently hydrogen, C<sub>2-6</sub> alkyl, C<sub>2-6</sub> haloalkyl, phenyl (which may be optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino, dialkylamino or C<sub>1-4</sub> alkoxycarbonyl) or heteroaryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy, C<sub>1-4</sub> alkoxycarbonyl C<sub>1-6</sub> alkylcarbonylamino, phenyloxycarbonylamino (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), amino, C<sub>1-6</sub> alkylamino or phenylamino (wherein the phenyl group is optionally



substituted halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino).

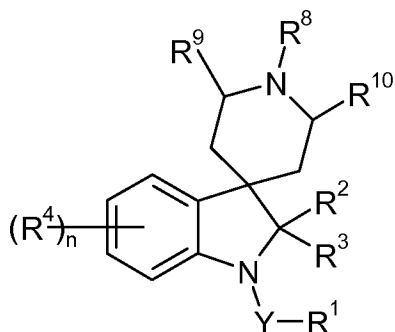
4. (Withdrawn) A method according to claim 1, wherein R<sup>2</sup> and R<sup>3</sup> are independently hydrogen or C<sub>1-4</sub> alkyl.

5. (Withdrawn) A method according to claim 1, wherein each R<sup>4</sup> is independently halogen, cyano, C<sub>1-8</sub> alkyl, C<sub>1-8</sub> haloalkyl, C<sub>1-6</sub> cyanoalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>3-7</sub> cycloalkyl(C<sub>1-6</sub>)alkyl, C<sub>5-6</sub> cycloalkenyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkenyloxy(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkynyloxy(C<sub>1-6</sub>)alkyl, aryloxy(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> carboxyalkyl, C<sub>1-6</sub> alkylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>2-6</sub> alkenylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>2-6</sub> alkynylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkenyloxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkynyloxycarbonyl(C<sub>1-6</sub>)alkyl, aryloxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylthio(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylsulfinyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylsulfonyl(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylaminocarbonyl(C<sub>1-6</sub>)alkyl, di(C<sub>1-6</sub>)alkylaminocarbonyl(C<sub>1-6</sub>)alkyl, phenyl(C<sub>1-4</sub>)alkyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl(C<sub>1-4</sub>)alkyl (wherein the heteroaryl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocyclyl(C<sub>1-4</sub>)alkyl (wherein the heterocyclyl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>2-6</sub> alkenyl, aminocarbonyl(C<sub>2-6</sub>)alkenyl, C<sub>1-6</sub> alkylaminocarbonyl(C<sub>2-6</sub>)alkenyl, di(C<sub>1-6</sub>)alkylaminocarbonyl(C<sub>2-6</sub>)alkenyl, phenyl(C<sub>2-4</sub>)alkenyl, (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), C<sub>2-6</sub>

alkynyl, trimethylsilyl(C<sub>2-6</sub>)alkynyl, aminocarbonyl(C<sub>2-6</sub>)alkynyl, C<sub>1-6</sub> alkylaminocarbonyl(C<sub>2-6</sub>)alkynyl, di(C<sub>1-6</sub>)alkylaminocarbonyl(C<sub>2-6</sub>)alkynyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-7</sub> halocycloalkyl, C<sub>3-7</sub> cyanocycloalkyl, C<sub>1-3</sub> alkyl(C<sub>3-7</sub>)-cycloalkyl, C<sub>1-3</sub> alkyl(C<sub>3-7</sub>)halocycloalkyl, phenyl (optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocyclyl (wherein the heterocyclyl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), or 2 adjacent groups R<sup>4</sup> together with the carbon atoms to which they are attached form a 4, 5, 6, or 7 membered carbocyclic or heterocyclic ring which may be optionally substituted by halogen, C<sub>1-8</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, phenoxy (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heteroaryloxy (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>1-8</sub> alkylthio or R<sup>19</sup>R<sup>20</sup>N where R<sup>19</sup> and R<sup>20</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-6</sub> alkenyl, C<sub>3-6</sub> alkynyl, C<sub>2-6</sub> haloalkyl, C<sub>1-6</sub> alkoxycarbonyl or R<sup>19</sup> and R<sup>20</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups; n is 0, 1, 2, 3 or 4.

6. (Withdrawn) A method according to claim 1, wherein R<sup>8</sup> is C<sub>1-10</sub> alkyl, C<sub>1-10</sub> haloalkyl, aryl(C<sub>1-6</sub>)alkyl (wherein the aryl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl(C<sub>1-6</sub>)alkyl (wherein the heteroaryl

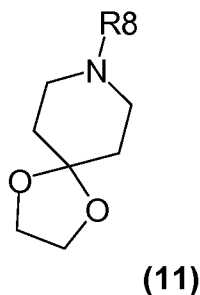
7. (Withdrawn) A method according to claim 1, wherein R<sup>9</sup> and R<sup>10</sup> are both hydrogen.



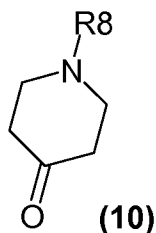
wherein Y is a single bond, C=O or S(O)<sub>q</sub> where q is 0, 1 or 2; R<sup>1</sup> is C<sub>1-8</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> cyanoalkyl, C<sub>3-7</sub> cycloalkyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkenyloxy-(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkynyloxy(C<sub>1-6</sub>)alkyl, aryloxy(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> carboxyalkyl, C<sub>1-6</sub> alkylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>2-6</sub> alkenylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>2-6</sub> alkynylcarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxy carbonyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkenyloxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> alkynyloxycarbonyl(C<sub>1-6</sub>)alkyl, aryloxycarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylthio(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylsulfinyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylsulfonyl(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylaminocarbonyl(C<sub>1-6</sub>)alkyl, di(C<sub>1-6</sub>)alkylaminocarbonyl(C<sub>1-6</sub>)alkyl, phenyl(C<sub>1-4</sub>)alkyl (wherein the phenyl group is optionally substituted by halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heteroaryl(C<sub>1-4</sub>)alkyl (wherein the heteroaryl group may be substituted by halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocyclyl(C<sub>1-4</sub>)alkyl (wherein the heterocyclyl group may be substituted by halogen, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), phenyl (optionally substituted by halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heteroaryl (optionally substituted by halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> haloalkenyl, C<sub>2-6</sub> cyanoalkenyl, C<sub>2-6</sub> alkynyl, C<sub>3-7</sub> cycloalkyl, formyl,

heterocyclyl (optionally substituted by halogen, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy) or C<sub>1-6</sub> alkylthio; R<sup>2</sup> and R<sup>3</sup> are independently hydrogen or C<sub>1-4</sub> alkyl; each R<sup>4</sup> is independently halogen, cyano, C<sub>1-10</sub> alkyl optionally substituted by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy), C<sub>2-6</sub> alkenyl optionally substituted by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy) or C<sub>2-6</sub> alkynyl optionally substituted by C<sub>1-6</sub> alkoxy, halogen, phenyl (itself optionally substituted by halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy); n is 0, 1, 2, 3 or 4; R<sup>8</sup> is -C(R<sup>51</sup>)(R<sup>52</sup>)-[CR<sup>53</sup>=CR<sup>54</sup>]<sub>z</sub>-R<sup>55</sup> where z is 1 or 2, preferably 1, R<sup>51</sup> and R<sup>52</sup> are each independently H, halo or C<sub>1-2</sub> alkyl, R<sup>53</sup> and R<sup>54</sup> are each independently H, halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> haloalkyl and R<sup>55</sup> is phenyl substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy; R<sup>9</sup> and R<sup>10</sup> are both hydrogen; and salts or N-oxides thereof provided that R<sup>8</sup> is not methyl and YR<sup>1</sup> is not SO<sub>2</sub>CH<sub>3</sub>, methyl, ethyl, phenyl or fluoro-substituted phenyl.

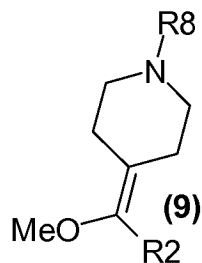
9. (Withdrawn) A compound of formula (11)



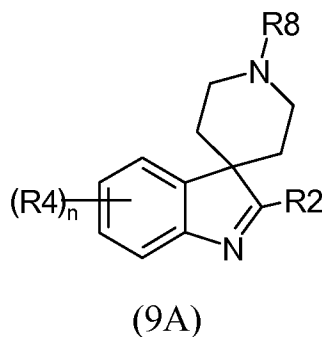
where R<sup>8</sup> is phenyl(C<sub>2-4</sub>)alkenyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy; or a compound of formula (10)



where R<sup>8</sup> is phenyl(C<sub>2-4</sub>)alkenyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy; or a compound of formula (9)



where R<sup>2</sup> is as defined for formula (I) in claim 1 and R<sup>8</sup> is phenyl(C<sub>2-4</sub>)alkenyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy; or a compound of formula (9A)



where R<sup>2</sup> and where (R<sup>4</sup>)<sub>n</sub> are as defined for formula (IK) in claim 8 and R<sup>8</sup> is phenyl(C<sub>2-4</sub>)alkenyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, or C<sub>1-4</sub> alkoxy.

10. (Previously presented) An insecticidal, acaricidal or nematocidal composition comprising an insecticidally, acaricidally or nematocidally effective amount of a compound of formula IK as defined in claim 8.
11. (Previously presented) A compound according to claim 8 wherein Y is a single bond, C=O or SO<sub>2</sub>.
12. (Previously presented) A compound according to claim 8 wherein R<sup>1</sup> is C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, heteroaryl(C<sub>1-3</sub>)alkyl (wherein the heteroaryl group may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, or C<sub>1-6</sub> haloalkoxy), phenyl(C<sub>1-3</sub>)alkyl (wherein the phenyl group may be optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, or NO<sub>2</sub>), phenyl (which may be optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, or NO<sub>2</sub>), heteroaryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, or C<sub>1-6</sub> haloalkoxy), C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>2-6</sub> alkenyl, heterocyclyl (optionally substituted by halo, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), or C<sub>1-6</sub> alkylthio.
13. (Previously presented) A compound according to claim 8 wherein R<sup>2</sup> and R<sup>3</sup> are independently hydrogen or methyl.
14. (Previously presented) A compound according to claim 8 wherein each R<sup>4</sup> is independently fluoro, chloro, bromo, cyano, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> haloalkyl, or C<sub>1-3</sub> alkoxy(C<sub>1-3</sub>)alkyl; n is 0, 1 or 2.

## **EVIDENCE APPENDIX**

No additional evidence has been relied upon for this Appeal and therefore this Evidence Appendix contains no additional information.



## **RELATED PROCEEDINGS APPENDIX**

Since there are no related appeals, interferences or other proceedings, no decisions have been rendered and/or included in this Appendix.